

NVAiS 8108

4U Rack AI Workstation NVR
with Intel® Xeon® 600 Processor for Workstation



Main Features

- ♦ System 4U Rackmount
- ♦ Intel® Xeon® 600 Processor (LGA4710)
- ♦ HDD 8 Bays 3.5"
- ♦ 2 x NVME SSD
- ♦ 1 x HDMI® 1.4
- ♦ 8 x DDR5 RDIMM up to 1TB
- ♦ 2 x 2.5 GbE Intel Ethernet
- ♦ 7 x PCIe x16
- ♦ Support 4x full-length (2-slot width) PCIe card

Product Overview

The NVAiS 8108 AI NVR is powered by Intel® Xeon® 600 workstation processor series, which is built on the Intel 3 process and featuring up to 86 P-cores, depending on the CPU SKU. Built in the CPU, Intel® Advanced Matrix Extensions (Intel® AMX) delivers up to 8X faster matrix operations for AI, machine learning, and scientific computing compared to AVX-512, with support for FP16, software prefetching, branch prediction, per-thread MBA, and L2 CAT/CDP. In addition, Intel® Xeon® 600 supports CXL 2.0 standard which enables high-speed, low-latency, memory-coherent PCIe connectivity, boosting system scalability and efficiency.

Four full-length PCIe slots offer high-performance data transfer and flexible system expansion, supporting large-scale AI workloads and demanding NVR applications. With high bandwidth, robust power and cooling, the NVAiS 8108 provides a scalable platform for AI infrastructure in research and enterprise environments, helping address current and future computing demands.

Specifications

Processor

- ♦ Intel® Xeon® 600 Processor for Workstation (GNR-W LGA4710)

Memory

- ♦ 8 x DDR5 RDIMM ECC, up to 1TB (4800/5200 MT/s, 6400-rated only)

Chipset

- ♦ Intel® W890

I/O Interface Front

- ♦ 8 x Hot swappable 3.5" HDD bays
- ♦ 2 x USB 2.0, Type-A, per port output max. 500mA
- ♦ Power/Reset Button
- ♦ Power/HDD LEDs

I/O Interface Rear

- ♦ 4 x USB 3.2 Gen1, Type-A, per port output max. 900mA
- ♦ 1 x HDMI 1.4®
- ♦ 2 x 2.5GbE RJ45 port, LAN1 supports Intel vPro® Enterprise

Expansion Slot

- ♦ 4 x FHFL (2-slot width) PCIe Gen4/5 x16 slot
- ♦ 7 x HHHL (1-slot width) PCIe Gen4/5 x16 slot, supported by CPU SKU

Storage

- ♦ Hot swappable 3.5" HDD x8, supports up to 26TB
- ♦ 2 x M.2 M-Key 2280 SSD (PCIe 4.0 x4)

Power Supply

- ♦ Redundant Power 1+1 1600W
- ♦ 90~140V AC max.1000W
- ♦ 180~264V AC max.1600W

Mechanical

- ♦ 481.6mm(W) x 699mm(D) x 176.5mm(H), 4U 19" rackmount

Operating System

- ♦ Windows 10/11
- ♦ Windows 10/11 IOT LTSC
- ♦ Linux Ubuntu

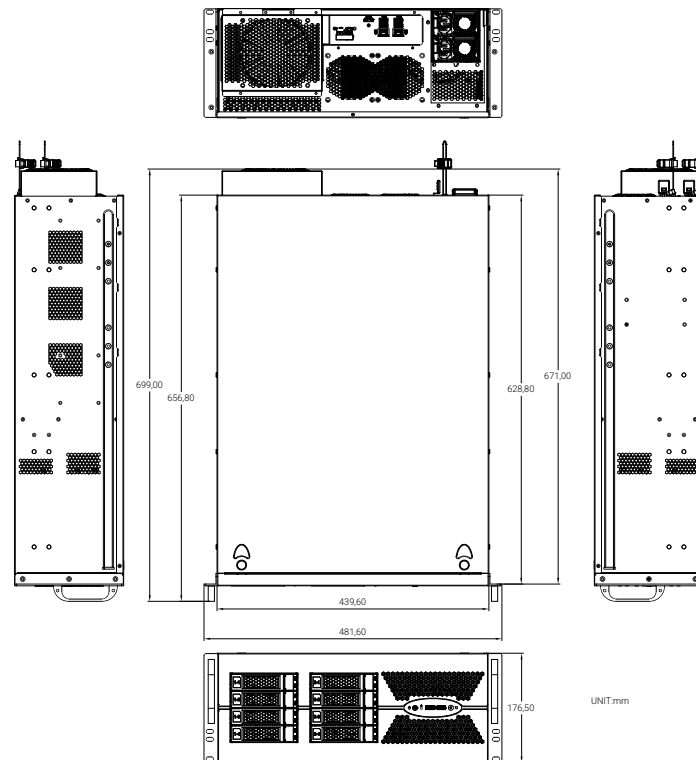
Environment

- ♦ Operating temperature:
- ♦ Ambient with air flow: 0°C ~ 40°C
- ♦ Storage temperature: -20°C ~ 70°C
- ♦ Relative humidity: 0% ~ 90% (non-condensing)

Certifications

- ♦ CE approval
- ♦ FCC Class A
- ♦ UL compliance

Dimension Drawing



Ordering Information

- ♦ NVAiS 8108 (P/N: TBD)